

Why do I have gaps in my wood gym floor every two or three feet?

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This seems to be the one of the most common questions asked about gymnasium floors. These gaps are referred to as intermediate expansion spaces or washer rows. Wood flooring is a material that expands or contracts when moisture is absorbed into or evaporated from the flooring. These spaces allow the flooring to move incrementally across the floor in smaller units as opposed to one wide unit moving back and forth at the perimeter walls. The term “washer row” is used because of the method that was used to keep the expansion space open until the flooring was nailed. As the installers would nail the flooring, they would use a thin metal washer between the flooring strips, as needed, to create an intermediate expansion space in the rows of flooring. Newer methods of creating this gap have been utilized by using a nylon string or “weed eater” line that is removed as the flooring is installed.

As technology has moved forward, some flooring manufacturers have machined small expansion ridges into the wood flooring. This smaller expansion ridge technology (ERT) on each strip of flooring creates smaller but more frequent gaps allowing the same movement of the flooring with intermediate expansion spaces that are less visually objectionable.

Maple floors in the United States experience moderate seasonal moisture content swings as a result of normal climate changes during the year. For an example of why the expansion space is an important function of a wood floor, a four percent change in moisture content in a wood floor translates to less than 1/32” of expansion or contraction for each 2 ¼” face-width board. Take this measurement across 32 boards and your gym floor has moved almost one inch in a six foot area. This example also shows the extreme importance of following your manufacturer’s instructions for humidity and temperature controls year-round.

Keep in mind that these expansion spaces will typically disperse across the floor and be less noticeable as the floor acclimates to its surroundings.

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